

# Road Inventory Data Dictionary

Field Name	Alias	Type	Precn.	Scale	Length	Edit	Null	Req.	Domain Fixed
RoadInventory_ID	RoadInventory_ID	Integer	0	0	4	Yes	No	Yes	No
CRN	CRN	String	0	0	9	Yes	No	Yes	No
RoadSegment_ID	RoadSegment_ID	Integer	0	0	4	Yes	No	Yes	No
FromMeasure	FromMeasure	Double	0	0	8	Yes	No	Yes	No
ToMeasure	ToMeasure	Double	0	0	8	Yes	No	Yes	No
AssignedLength	AssignedLength	Double	0	0	8	Yes	No	Yes	No
AssignedLengthSource	AssignedLengthSource	Small Integer	0	0	2	Yes	No	Yes	No
StreetList_ID	StreetList_ID	Integer	0	0	4	Yes	No	Yes	No
StreetName	StreetName	String	0	0	255	Yes	No	Yes	No
City	City	Small Integer	0	0	2	Yes	No	Yes	Yes
County	County	String	0	0	255	Yes	No	Yes	Yes
MunicipalStatus	MunicipalStatus	Small Integer	0	0	2	Yes	No	Yes	Yes
FromEndType	FromEndType	Small Integer	0	0	2	Yes	Yes	No	Yes
FromStreetName	FromStreetName	String	0	0	255	Yes	Yes	No	No
FromCity	FromCity	Small Integer	0	0	2	Yes	Yes	No	Yes
FromState	FromState	Small Integer	0	0	2	Yes	Yes	No	Yes
ToEndType	ToEndType	Small Integer	0	0	2	Yes	Yes	No	Yes
ToStreetName	ToStreetName	String	0	0	255	Yes	Yes	No	No
ToCity	ToCity	Small Integer	0	0	2	Yes	Yes	No	Yes
ToState	ToState	Small Integer	0	0	2	Yes	Yes	No	Yes
MileageCounted	MileageCounted	Small Integer	0	0	2	Yes	No	Yes	Yes
RouteKey	RouteKey	String	0	0	20	Yes	Yes	No	No
RouteFrom	RouteFrom	Double	0	0	8	Yes	Yes	No	No
RouteTo	RouteTo	Double	0	0	8	Yes	Yes	No	No
RouteSystem	RouteSystem	String	0	0	255	Yes	Yes	No	Yes
RouteNumber	RouteNumber	String	0	0	10	Yes	Yes	No	No
SubRoute	SubRoute	String	0	0	10	Yes	Yes	No	No
RouteDirection	RouteDirection	String	0	0	255	Yes	Yes	No	Yes
RouteType	RouteType	Small Integer	0	0	2	Yes	Yes	No	Yes
RouteQualifier	RouteQualifier	Small Integer	0	0	2	Yes	Yes	No	Yes
RPA	RPA	String	0	0	20	Yes	No	Yes	Yes
MPO	MPO	String	0	0	35	Yes	No	Yes	Yes
MassHighwayDistrict	MassHighwayDistrict	Small Integer	0	0	2	Yes	No	Yes	Yes
UrbanType	UrbanType	Small Integer	0	0	2	Yes	No	Yes	Yes
UrbanizedArea	UrbanizedArea	String	0	0	255	Yes	Yes	No	Yes
FunctionalClassification	FunctionalClassification	Small Integer	0	0	2	Yes	Yes	No	Yes
Jurisdiction	Jurisdiction	String	0	0	255	Yes	Yes	No	Yes
TruckRoute	TruckRoute	Small Integer	0	0	2	Yes	Yes	No	Yes
NHSSStatus	NHSSStatus	Small Integer	0	0	2	Yes	Yes	No	Yes
FederalAidRouteNumber	FederalAidRouteNumber	String	0	0	10	Yes	Yes	No	Yes
FacilityType	FacilityType	Small Integer	0	0	2	Yes	Yes	No	Yes

**Road Inventory Data Dictionary**

StreetOperation	StreetOperation	Small Integer	0	0	2	Yes	Yes	No	Yes
AccessControl	AccessControl	Small Integer	0	0	2	Yes	Yes	No	Yes
TollRoad	TollRoad	Small Integer	0	0	2	Yes	Yes	No	Yes
NumberOfPeakHourLanes	NumberOfPeakHourLanes	Small Integer	0	0	2	Yes	Yes	No	No
RightSidewalkWidth	RightSidewalkWidth	Small Integer	0	0	2	Yes	Yes	No	No
RightShoulderType	RightShoulderType	Small Integer	0	0	2	Yes	Yes	No	Yes
RightShoulderWidth	RightShoulderWidth	Small Integer	0	0	2	Yes	Yes	No	No
MedianType	MedianType	Small Integer	0	0	2	Yes	Yes	No	Yes
MedianWidth	MedianWidth	Small Integer	0	0	2	Yes	Yes	No	No
LeftSidewalkWidth	LeftSidewalkWidth	Small Integer	0	0	2	Yes	Yes	No	No
LeftShoulderType	LeftShoulderType	Small Integer	0	0	2	Yes	Yes	No	Yes
LeftShoulderWidth	LeftShoulderWidth	Small Integer	0	0	2	Yes	Yes	Yes	No
SurfaceType	SurfaceType	Small Integer	0	0	2	Yes	Yes	No	Yes
SurfaceWidth	SurfaceWidth	Small Integer	0	0	2	Yes	Yes	No	No
RightOfWayWidth	RightOfWayWidth	Small Integer	0	0	2	Yes	Yes	No	No
NumberOfTravelLanes	NumberOfTravelLanes	Small Integer	0	0	2	Yes	Yes	No	No
OppositeNumberofTravelLanes	OppositeNumberofTravelLanes	Small Integer	0	0	2	Yes	Yes	No	No
Curbs	Curbs	Small Integer	0	0	2	Yes	Yes	No	Yes
Terrain	Terrain	Small Integer	0	0	2	Yes	No	Yes	Yes
SpeedLimit	SpeedLimit	Small Integer	0	0	2	Yes	Yes	No	No
StructuralCondition	StructuralCondition	Small Integer	0	0	2	Yes	Yes	No	Yes
ADT	ADT	Integer	0	0	4	Yes	Yes	No	No
ADTStationNumber	ADTStationNumber	Integer	0	0	4	Yes	Yes	No	No
ADTDerivation	ADTDerivation	Small Integer	0	0	2	Yes	Yes	No	Yes
ADTYear	ADTYear	Small Integer	0	0	2	Yes	Yes	No	No
IRI	IRI	Small Integer	0	0	2	Yes	Yes	No	No
IRIYear	IRIYear	Small Integer	0	0	2	Yes	Yes	No	No
IRIStatus	IRIStatus	Small Integer	0	0	2	Yes	Yes	No	Yes
PSI	PSI	Small Integer	0	0	2	Yes	Yes	No	No
PSIYear	PSIYear	Small Integer	0	0	2	Yes	Yes	No	No
HPMSCode	HPMSCode	Small Integer	0	0	2	Yes	Yes	No	Yes
HPMSSample_ID	HPMSSample_ID	String	0	0	12	Yes	Yes	No	No
AddedRoadType	AddedRoadType	Small Integer	0	0	2	Yes	Yes	No	Yes
DateActive	DateActive	Date	0	0	8	Yes	No	Yes	No
LifeCycleStatus	LifeCycleStatus	Small Integer	0	0	2	Yes	No	Yes	Yes
ITEM_ID	ITEM_ID	Integer	0	0	4	Yes	No	Yes	No
OBJECTID	OBJECTID	OID	0	0	4	No	No	Yes	No
Shape	Shape	Geometry	0	0	0	Yes	No	Yes	No

## Field Descriptions

**RoadInventory\_ID:** A unique identifier for every arc within the *RoadInventory* file. Derived from the *RoadSegment\_ID*, appended with an incrementing identifier starting with “00”. Will remain consistent on future *RoadInventory* publications.

**CRN:** A derived field combining the character for County code with the *RoadInventory\_ID* unique identifier

**RoadSegment\_ID:** The identifier defining the source segment of each *RoadInventory* arc

**FromMeasure:** The measured length along the specified *RoadSegment* feature where this *RoadInventory* segment starts

**ToMeasure:** The measured length along the *RoadSegment* feature where this *RoadInventory* segment ends

**AssignedLength:** Segment length in miles

**AssignedLengthSource:** Defines the source of the assigned length value

0 = Shape length

1 = Odometer

2 = Odometer prorated from CSN pair (60000-rule) during migration from coverage model

**StreetList\_ID:** The identifier of the Street the segment lies on

**StreetName:** The name of the street the segment lies on

**City**

1= Abington & 351 = Yarmouth

**County**

A = Barnstable

B = Berkshire

C = Bristol

D = Dukes

E = Essex

F = Franklin

G = Hampden

H = Hampshire

I = Middlesex

J = Nantucket

K = Norfolk

L = Plymouth

M = Suffolk

N = Worcester

**MunicipalStatus**

1 = City

2 = Town

**FromEndType:** Defines the start of the street the segment lies on

1 = Cross-street

2 = Dead end

3 = Cul-de-sac

4 = Private property

5 = Town line

6 = State line

**FromStreetName:** The cross-street where the street starts (when the street starts at a cross-street)

**FromCity:** The city where the street starts when the street starts at a city boundary

1= Abington & 351 = Yarmouth

**FromState:** The state where the street starts when the street starts at a state boundary

- 1 = Connecticut
- 2 = New Hampshire
- 3 = New York
- 4 = Rhode Island
- 5 = Vermont

**ToEndType** Defines the end of the street the segment lies on

- 1 = Cross-street
- 2 = Dead end
- 3 = Cul-de-sac
- 4 = Private property
- 5 = Town line
- 6 = State line

**ToStreetName:** The cross-street where the street ends (when the street ends at a cross-street)

**ToCity:** The city where the street ends when the street ends at a city boundary

- 1 = Abington & 351 = Yarmouth

**ToState:** The state where the street ends when the street ends at a state boundary

- 1 = Connecticut
- 2 = New Hampshire
- 3 = New York
- 4 = Rhode Island
- 5 = Vermont

**MileageCounted:** Describes whether the segments length is counted towards the official statewide road centerline mileage

- 1 = Yes
- 0 = No
- Note - See Facility Type

**RouteKey:** The primary state numbered route or designated non-numbered route on which this segment lies; when more than one route traverse a segment, the *highest order* (Interstate > US Highway > State Route), *lowest number* route is primary; non-numbered routes are used internally by Planning for pavement data collections

**RouteFrom:** The measured length along the specified *Route* where this *RoadInventory* segment starts

**RouteTo:** The measured length along the specified *Route* where this *RoadInventory* segment ends

**RouteSystem**

- I = Interstate
- US = US Highway
- SR = State Route
- 0 = Not a numbered route

**RouteNumber:** The official route number designation; need not be exclusively numeric (*146A*, for example)

**SubRoute:** Optional designation to distinguish alternate sections of the same numbered route

**RouteDirection**

- NB = North
- EB = East
- SB = South
- WB = West

**RouteType**

- 0 = Non-numbered
- 1 = Numbered-Primary (NB/EB)
- 2 = Numbered-Opposing (SB/WB)

**RouteQualifier:** (Reserved for future use -- not implemented at this time)

- 0 = No Qualifier or Not Signed or Not Applicable
- 1 = Alternate

- 2 = Business Route
- 3 = Bypass
- 4 = Spur
- 5 = Loop
- 6 = Proposed
- 7 = Temporary
- 8 = Truck Route
- 9 = None of the Above

**RPA:** Regional Planning Agency

- BRPC = Berkshire Regional Planning Commission
- CCC = Cape Cod Commission
- CMRPC = Central Massachusetts Regional Planning Commission
- FRCOG = Franklin Regional Council of Governments
- MAPC = Metropolitan Area Planning Council
- MRPC = Montachusett Regional Planning Commission
- MVC = Marthas Vineyard Commission
- MVPC = Merrimack Valley Planning Commission
- NMCOG = Northern Middlesex Council of Governments
- NPEDC = Nantucket Planning and Economic Development Commission
- OCPC = Old Colony Planning Council
- PVPC = Pioneer Valley Planning Commission
- SRPEDD = Southeastern Regional Planning and Economic Development District

**MPO:** Metropolitan Planning Organization

- Berkshire
- Boston Region
- Cape Cod
- Central Massachusetts
- Franklin
- Martha's Vineyard
- Merrimack Valley
- Montachusett
- Nantucket
- Northern Middlesex
- Old Colony
- Pioneer Valley
- Southeastern Massachusetts

**MassHighwayDistrict**

- MinValue: 1
- MaxValue: 5

**UrbanType**

- 1 = Urbanized area – Densely settled territory that contains 50,000 people or more
- 2 = Urban cluster – Densely settled territory that contains at least 5,000 people but fewer than 50,000 people
- 5 = Rural

**UrbanizedArea**

- 0 = RURAL
- 7 = Boston (MA-NH-RI)
- 26 = Providence (RI-MA)
- 43 = Springfield (MA-CT)
- 76 = Worcester (MA-CT)
- 127 = New Bedford
- 189 = Leominster-Fitchburg
- 199 = Pittsfield
- 246 = Nashua (NH-MA)
- 394 = Barnstable Town
- A = Amherst
- B = Athol
- C = Great Barrington
- D = Greenfield
- E = Lee
- F = Nantucket

G = North Adams (MA-VT)  
I = Pepperell  
K = Stafford (CT-MA)  
L = Vineyard Haven  
M = Ware  
O = Winchendon (MA-NH)

**FunctionalClassification:** *Note: use urban/rural designation to interpret functional classification*

0 = Local  
1 = Interstate  
2 = Principal arterial  
3 = Rural minor arterial or urban principal arterial  
5 = Urban minor arterial or rural major collector  
6 = Urban collector or rural minor collector

**Jurisdiction**

1 = Massachusetts Highway Department  
2 = City or Town accepted road  
3 = Department of Conservation and Recreation  
4 = Massachusetts Turnpike Authority  
5 = Massachusetts Port Authority  
6 = State Park or Forest  
7 = State Institutional  
8 = Federal Park or Forest  
9 = County Institutional  
0 = Unaccepted by city or town  
B = State college or university  
C = US Department of Defense  
D = US Army Corps of Engineers  
E = Federal Institutional  
F = Other Federal  
G = Federal Bureau of Indian Affairs  
H = Private

**Truck Route**

0 = Not a parkway - not on a designated truck route  
1 = Designated truck route under Federal Authority in 23 CFR 658  
Available to STAA vehicles (Twin 28' Semi-trailer-trailer and 48' Semi-trailer combinations)  
2 = Designated truck route ONLY under State Authority.  
Fully available to both types of STAA vehicles described above  
3 = Department of Conservation and Recreation Parkway – No trucks allowed

**NHSStatus:** National Highway System Status

0 = Not on NHS  
1 = NHS - Interstate  
2 = NHS - Strategic Defense Highway System (STRAHNET)  
3 = NHS - STRAHNET Connector  
4 = NHS - Other - One-way pair  
5 = NHS - Other - Truck route exclusion  
6 = NHS - Major Airport  
7 = NHS - Major Port Facility  
8 = NHS - Major Amtrak Station  
9 = NHS - Major Rail/Truck terminal  
10 = NHS - Major Intercity Bus Terminal  
11 = NHS - Major Public Transit or Multi-Modal Passenger Terminal  
12 = NHS - Major Pipeline Terminal  
13 = NHS - Major Ferry Terminal  
14 = NHS - Other (not in above categories)

**FederalAidRouteNumber:** Maintained for historical purposes

**FacilityType**

1 = Mainline roadway\*  
2 = Bridge\*  
3 = Tunnel\*

- 4 = Doubledeck\*
- 5 = Rotary\*
- 6 = Causeway\*
- 7 = Simple ramp
- 8 = Ramp - NB/EB
- 9 = Ramp - SB/WB
- 10 = Collector - Distributor
- 11 = Simple Ramp - Tunnel
- 12 = Bicycle

\*Road types included in official statewide road centerline mileage

**StreetOperation**

- 1 = One-way traffic
- 2 = Two-way traffic

**AccessControl**

- 0 = No control
- 1 = Full control
- 2 = Partial control

**TollRoad**

- 0 = Not a toll road
- 1 = A toll road

**NumberOfPeakHourLanes:** Number of lanes open for vehicles during Peak travel times including breakdown and high-occupancy vehicle lanes

**RightSidewalkWidth:** Width of the sidewalk in feet on the right side of the road traveling in the primary (NB/EB) direction of travel

**RightShoulderType:** Type of shoulder on the right side of the road traveling in the primary (NB/EB) direction of travel

- 0 = No Shoulder
- 1 = Stable - Unrutable compacted subgrade
- 2 = Unstable shoulder
- 3 = Hardened bituminous mix or penetration
- 4 = Combination shoulder

**RightShoulderWidth:** Width of shoulder in feet on the right side of the road traveling in the primary (NB/EB) direction of travel

**MedianType:** Type of median on divided roadways

- 0 = None
- 1 = Curbed
- 2 = Positive barrier
- 3 = Unprotected

**MedianWidth:** Width of median in feet on divided roadways

MinValue: 1  
MaxValue: 999

**LeftSidewalkWidth:** Width of the sidewalk in feet on the left side of the road traveling in the primary (NB/EB) direction of travel; on divided roadways, this will fall on the opposing direction (see illustration)

**LeftShoulderType:** Type of shoulder on the left side of the road traveling in the primary (NB/EB) direction of travel; for divided roadways median shoulders are assumed to be of the same type

- 0 = No Shoulder
- 1 = Stable - Unrutable compacted subgrade
- 2 = Unstable shoulder
- 3 = Hardened bituminous mix or penetration
- 4 = Combination shoulder

**LeftShoulderWidth:** Width of shoulder in feet on the left side of the road traveling in the primary (NB/EB) direction of travel; for divided roadways median shoulders are assumed to be of the same type

**SurfaceType**

- 1 = Unimproved, graded earth, or soil surface road
- 2 = Gravel or stone road
- 3 = Brick road
- 4 = Block road
- 5 = Surface-treated road
- 6 = Bituminous concrete road
- 7 = Portland cement concrete road
- 8 = Composite road; flexible over rigid
- 9 = Composite road; rigid over flexible or rigid over rigid ("white topping")

**SurfaceWidth:** Surface width in feet; measurement of traveled way, excluding shoulders/auxiliary lanes

**RightOfWayWidth:** Right-of-way width in feet

**NumberOfTravelLanes:** Number of travel lanes (for undivided roadways, number of lanes in both directions of travel, for divided roadways, number of lanes on the given segment only)

MinValue: 1

MaxValue: 6

**OppositeNumberOfTravelLanes:** Number of travel lanes in the opposite direction of a divided roadway

MinValue: 1

MaxValue: 6

**Curbs**

- 0 = None
- 1 = Left side only
- 2 = Right side only
- 3 = Both sides
- 4 = Along median only
- 5 = All curbs (divided highway)

**Terrain**

- 1 = Level
- 2 = Rolling
- 3 = Mountainous

**SpeedLimit**

MinValue: 5

MaxValue: 65

**StructuralCondition**

- 1 = Good
- 2 = Fair
- 3 = Deficient
- 4 = Intolerable

**ADT:** Average Annual Daily Traffic

**ADTStationNumber:** ADT count station location number; used to reference Traffic Data Collections counting station number

**ADTDerivation**

- 0 = Not applicable
- 1 = Derived from counts collected on or adjacent to the section during the current year
- 2 = Derived from factoring counts from the previous year count-base AADT that is less than three years old
- 3 = Derived from count data that is three or more years old
- 4 = Derived from an estimate
- 5 = Working code for principal arterial counting program

**ADTYear:** Year of ADT collection

**IRI:** Pavement Roughness; value reflects calibrated value in inches of roughness per mile

**IRIYear:** Year of IRI collection



**IRIStatus**

- 1 = IRI data collected
- 2 = No IRI data collected due to speed
- 3 = No IRI data collected due to construction
- 4 = No data collected due to bridge deck

**PSI:** Pavement Servicibility Index; value based on a five-point rating system reflecting the quality of pavement in terms of slope variance, cracking, etc.

**PSIYear:** Year of PSI collection

**HPMSCode**

- 0 = Not an HPMS section nor on a road that has an HPMS section
- 1 = Not an HPMS section but is on a road that has an HPMS section
- 2 = An HPMS section

**HPMSSample\_ID:** The HPMS Sample identifier for sections lying on a designated HPMS sample

**AddedRoadType:** Description of roads added to the GIS that are 250 feet or more and serve a specific land use

- 0 = Default/Not applicable
- 1 = Public road (but not highway ramp)
- 3 = Highway ramp
- 4 = Road appears in 1:5000-scale centerline file, but not in DLG or orthophotos
- 5 = Research park, industrial park, office park, shopping mall or center, condominium complex or subdivision
- 6 = Airport passenger or cargo area, port access road, intermodal terminal access road, or major truck terminal
- 7 = Treatment plant, electrical plant, petroleum depot, town or state facility, or other water, sewer, power, or communication facility
- 8 = State park or other recreational area
- 9 = Cul-de-sac
- 10 = Other private road
- 11 = Rest area

**DateActive:** The date the road became active, or, if not known, the date it was entered into the system; all roads active when this field was implemented were assigned a date 1/1/2004

**LifeCycleStatus**

- 1 = Proposed
- 2 = In Construction
- 3 = Active

**ITEM\_ID:** A sequential identifier assigned to each *RoadInventory segment*

**ObjectID:** ArcGIS internal unique identifier

**Shape:** ArcGIS geometry field